Corrective Action

March 6, 2012

Approved by Beverly H. van Buuren, Surface Water Ambient Monitoring Program Quality Assurance Officer, on March 6, 2012

1. Purpose

This document describes the process followed by the Surface Water Ambient Monitoring Program (SWAMP) to document, resolve, and follow-up on corrective actions associated with programmatic samples. The process is based on the SWAMP Corrective Action Form, and is applied to sample results that fail to meet the requirements of SWAMP and its associated projects.

The Corrective Action Form also allows the SWAMP Quality Assurance (QA) Team (QAT) to identify trends affecting programmatic completeness.

2. Responsibilities

Implementation of this process is shared among the "Reporting Party", "Involved Party", QAT, SWAMP QA Officer, and SWAMP Contract Manager. Specific roles are described below.

The "Reporting Party" and "Involved Parties" are responsible for providing the QAT and SWAMP Contract Manager with the information required to complete the "Description" portion of the Corrective Action Form. They are then responsible for completing the "Proposed Corrective Action" section, which is submitted to the QAT and SWAMP Contract Manager for approval.

The QAT is responsible for completing the "Description" portion of the Corrective Action Form. It must then get consent from the SWAMP Contract Manager to approve the "Proposed Corrective Action" before completing the "Follow-up". Finally, the QAT distributes a PDF of the finalized Corrective Action Form according to the form's header. Corrective actions are included in the scope of each annual Quality Assurance Report.

The SWAMP Contract Manager and SWAMP QA Officer (or their designee) is responsible for approving the completed *Corrective Action Form*.

3. Procedure

The process is based on the SWAMP *Corrective Action Form*, and is applied to sample results that fail to meet the measurement quality objectives (MQOs) and holding times specified in *Surface Water Ambient Monitoring Program Quality Assurance Program Plan* (QAPrP) Appendices A and B, respectively. Issues involving or affecting multiple parties may require separate or additional programmatic documents (e.g., memos, QAPrP addenda).

Procedures associated with each of the *Corrective Action Form*'s three sections are described below.

3.1 Description

This section of the form is completed by the QAT based on input from the "Reporting Party", "Involved Parties", and other SWAMP and project entities. This group then reviews the QAT draft to ensure that it is complete and accurate.

3.2 Proposed Corrective Action

Once the "Description" has been finalized, the "Involved Parties" have two weeks to complete this section of the form. It should detail a plan to prevent or correct a recurrence of the involved issue. If the issue is an anomaly, it should be specified here.

The QAPrP provides corrective action coverage that may be relevant to some *Corrective Action Forms*. The QAPrP's Appendix D: *Corrective Action* addresses the corrective actions associated with specific laboratory and field quality control (QC) samples. Additional coverage is provided in QAPrP Element B5: *Quality Control*.

3.3 Follow-up

Corrective Action

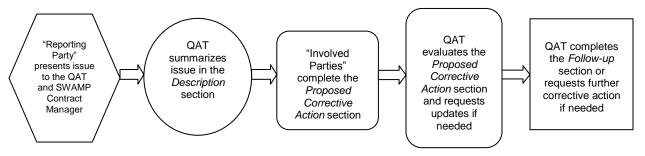
This section of the form is completed by the QAT to assess and document the effectiveness of the "Proposed Corrective Action". The follow-up measures are determined and scheduled by the QAT, and may demonstrate the need for further corrective action. In these cases, a new *Corrective Action Form* is initiated.

When the "Follow-up" section is completed, the *Corrective Action Form* is officially closed with the dated signature of the SWAMP QA Officer and SWAMP Contract Manager in the "For

SWAMP Use" box. The form is then converted to a PDF format and distributed to the parties in the "Reporting Party" and "Involved parties" fields. Finalized electronic and hard copies of each form are maintained and cataloged by the QAT for a minimum of five years.

Figure 1 depicts SWAMP's corrective action procedure – from reporting to follow-up.

Figure 1. SWAMP Corrective Action Procedure



4. References

Guidance for Preparing Standard Operating Procedures; EPA QA/G-6; U.S. Environmental Protection Agency, U.S. Government Printing Office: Washington, DC, 2001.

Surface Water Ambient Monitoring Program Quality Assurance Program Plan; Moss Landing Marine Laboratories, Moss Landing, CA, 2008.

Corrective Action March 6, 2012 Page 3 of 4

Appendix A: Corrective Action Form

Surface Water Ambient Monitoring Program Quality Assurance Program Plan Corrective Action Form

Date: Month XX, 20XX

Reporting Party: [Name (Organization)]

Involved Party: [Name (Organization)]

Subject: [Subject]

Description

[Description]

Proposed Corrective Action

[Proposed Corrective Action]

Follow-up

[Proposed Follow-up]

For SWAMP Use:

Resolution Date: [Date]

SWAMP Quality Assurance (QA) Officer Name: [Name]

SWAMP QA Officer Signature: [Signature] Date: [Date]

SWAMP Contract Manager: [Name]

SWAMP Contract Manager Signature: [Signature] **Date**: [Date]

Corrective Action March 6, 2012 Page 4 of 4